Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

42—26

Proceedings of the American Academy of Arts and Sciences.

Vol. XLII. No. 26.—April, 1907.

CONTRIBUTIONS FROM THE JEFFERSON PHYSICAL LABORATORY, HARVARD UNIVERSITY.

THE TRANSMISSION OF RÖNTGEN RAYS THROUGH METALLIC SHEETS.

By John Mead Adams.

Investigations on Light and Heat made and published, wholly or in part, with Appropriation from the Rumford Fund.

(Continued from page 3 of Cover.)

VOLUME 42.

1. ROBINSON, B. L. — Studies in the Eupatorieae: (I.) Revision of the Genus *Piqueria;* (II.) Revision of the Genus *Ophryosporus;* (III.) The Genus *Helogyne* and its Synonyms; (IV.) Diagnoses and Synonymy of *Eupatorieae* and of Certain Other *Compositae* which have been Classed with them. pp. 1–48. May, 1906. 50c.
2. SABINE, W. C. — Architectural Acoustics: (I.) Introduction; (II.) The Accuracy of Musical Taste in regard to Architectural Acoustics; (III.) Variation in Reverberation with Variation in Pitch. pp. 49–84. June, 1906. 45c.
3. PEIRCE, B. O. — On the Permeability and the Retentiveness of a Mass of Fine Iron Particles. pp. 85–91. June, 1906. 15c.
4. PEIRCE, B. O. — On the Length of the Time of Contact in the Case of a Quick Tap on a Telegraph Key. pp. 93–100. June, 1906. 15c.
5. MARK, E. L., and COPELAND, M. — Some Stages in the Spermatogenesis of the Honey Bee. pp. 101–111. 1 pl. June, 1906. 20c.
6. HOGG, J. L. — Friction and Force due to Transpiration as Dependent on Pressure in Gases. pp. 113–146. July, 1906. 45c.
7. PEIRCE, B. O. — On the Conditions to be Satisfied if the Sums of the Corresponding Members of Two Pairs of Orthogonal Functions of Two Variables are to be Themselves Orthogonal. pp. 147–157. July, 1906. 15c.
8. PEIRCE, B. O. — On the Correction for the Effect of the Counter Electromotive Force induced in a Moving Coil Galvanometer when the Instrument is used Ballistically. pp. 159–169. July, 1906. 15c.
9. PEIRCE, B. O. — A Simple Device for Measuring the Deflections of a Mirror Galvanometer. pp. 171–174. 1 pl. July, 1906. 15c.
10. RIDDLE, L. W. — On the Cytology of the Entomophthoraceae. pp. 175–197. 3 pls. August, 1906. 40c.
11. BAXTER, G. P. — A Revision of the Atomic Weight of Bromine. pp. 199–214. August, 1906. 25c.
12. LARRABEE, A P. — The Optic Chiasma of Teleosts: A Study of Inheritance. pp. 215–231. October, 1906. 25c.
13. WOOD, R. W. — Fluorescence and Magnetic Rotation Spectra of Sodium Vapor, and their Analysis. pp. 233–260. 5 pls. November, 1906. 65c.
14. ROTCH, A. L. — Results of the Franco-American Expedition to Explore the Atmosphere in the Tropics. pp. 261–272. December, 1906. 20c.
15. KENNELLY, A. E. — An Approximate Law of Fatigue in the Speeds of Racing Animals. pp. 273–331. December, 1906. $1.15.
16. COLE, L. J. — An Experimental Study of the Image-Forming Powers of Various Types of Eyes. pp. 333–417. January, 1907. $1.10.
17. SMITH, A. W. — Expansion and Compressibility of Ether and of Alcohol in the Neighborhood of their Boiling Points. pp. 419–460. January, 1907. 60c.
18. CONGDON, E. D. — The Hydroids of Bermuda. pp. 461–485. January, 1907. 40c.
19. BLACKMAN, M. W. — The Spermatogenesis of the Myriapods. (V.) On the Spermatocytes of Lithobius. pp. 487–518. 2 pls. February, 1907. 50c.
20. MOORE, A. H. — Revision of the Genus Spilanthes. pp. 519–569. March, 1907 60c.
21. RICHARDS, T. W., and Messrs. HENDERSON and FREVERT. — Concerning the Adiabatic Determination of the Heats of Combustion of Organic Substances, especially Sugar and Benzol. pp. 571–593. March, 1907. 35c.
22. HALL, E. H., and Messrs. CAMPBELL, SERVISS, and CHURCHILL. — On the Thomson Effect and the Temperature Coefficient of Thermal Conductivity in Soft Iron between 115° and 204° C. pp. 595–626. March, 1907. 40c.
23. MARK, E. L. — An Electric Wax-Cutter for Use in Reconstructions. pp. 627–636. March, 1907. 20c.
24. HENDERSON, L. J. — Concerning Position Isomerism and Heats of Combustion. pp. 637–647. March, 1907. 20c.
25. LOWELL, P. — Temperature of Mars. A Determination of the Solar Heat Received. pp. 649–667. March, 1907. 25c.
26. ADAMS, J. M. — The Transmission of Röntgen Rays through Metallic Sheets. pp. 669–697. April, 1907. 45c.

Proceedings of the American Academy of Arts and Sciences.

VOL. XLII. No. 26. — APRIL, 1907.

CONTRIBUTIONS FROM THE JEFFERSON PHYSICAL LABORATORY, HARVARD UNIVERSITY.

THE TRANSMISSION OF RÖNTGEN RAYS THROUGH METALLIC SHEETS.

BY JOHN MEAD ADAMS.

INVESTIGATIONS ON LIGHT AND HEAT MADE AND PUBLISHED, WHOLLY OR IN PART, WITH APPROPRIATION FROM THE RUMFORD FUND.